

DEPARTMENT OF PSYCHOLOGY Faculty of Arts

PSYC 591.2 Advanced Topics in Cognitive Psychology (Higher Cognitive Functions) Fall '22

Instructor: Andrea Protzner Lecture Location: ENF 334

Phone: 403-220-5566 **Lecture Days/Time:** F 14:00 - 16:45

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Office Hours: Flexible, but please email for

an appointment.

Course Description

The course provides an overview of cutting-edge research regarding human cognition. Students will first be introduced to methodological issues in the context of both healthy participants and clinical populations. Subsequent classes will consist of more in-depth examinations of specific topics, student presentations and class discussion of relevant scientific literature. The goal is for students to acquire knowledge about cognitive function through selected topics and to develop critical thinking skills when evaluating scientific literature.

Course Learning Outcomes

The Department of Psychology is committed to student knowledge and skill development. The table below lists the key learning outcomes for this course, the program-learning outcomes they facilitate (see https://live-arts.ucalgary.ca/psychology/about#program-learning-outcomes), and the expected level of achievement.

Course Learning Outcomes	Assessment Methods	PLO(s)	Level(s)
Understand the utility of different perspectives (e.g., different methodologies, different types of research questions) to investigate cognitive functioning and behaviour.	Evaluation of student's summary, presentation, and online question contribution.	1,2,5	С
Evaluate methodological approaches used in selected peer- reviewed scientific papers, and critique their overall contribution to the field of cognitive science.	Quality of student's online questions, and in class participation.	2,6	С
Create a scientific presentation aiming to disseminate knowledge in an engaging manner.	Quality of student's online summary and presentation.	4,5	A

Formulate questions and raise issues that generate discussion among peers.	Quality of student's online questions, and in class participation.	1,2,4,5	С
Design a novel experiment by formulating a specific hypothesis, and produce a written research proposal.	Quality and novelty of research proposal.	1-5,7	A

Notes. PLOs = Program-Learning Outcomes: 1 = demonstrate knowledge of psychological sciences, 2 = think critically and solve problems, 3 = conduct research and analyze data, 4 = communicate effectively, 5 = demonstrate information literacy, 6 = understand and implement ethical principles in a diverse world, 7 = apply psychological knowledge and skills, 8 = Demonstrate multicultural competence and awareness of issues related to equity, diversity,* and inclusion. Level of PLO achievement facilitated by this course: I = introductory, C = competency, A = advanced.

Acknowledgments and Respect for Diversity

Our classrooms view diversity of identity as a strength and resource. Your experiences and different perspectives are encouraged and add to a rich learning environment that fosters critical thought through respectful discussion and inclusion. The Department of Psychology would also like to acknowledge the traditional territories of the people of the Treaty 7 region in southern Alberta. The City of Calgary is also home to Métis Nation of Alberta, Region III.

Course Format

This is an in-person class held on campus.

Prerequisites

PSYC 300 as well as 301 or 312 (Experimental Design & Quantitative Methods) and PSYC 365 (Cognitive Psychology), and admission to either the Psychology major or Honors Program.

Required Text

There is no assigned textbook for this course. Instead, students will be given lecture notes and assigned readings compiled from various sources. These will be made available on D2L.

Assessment Methods

Student evaluations will be based on:
Leading one group discussion (25% of final grade)
Prepared questions posted online (10% of final grade)
Term paper (40% of final grade, due December 6th, 2022)
Participation in class throughout the course (25% of the final grade)

Late assignments will not be accepted without instructor approval.

During the first week of class, students will be asked to select a date (and, accordingly, a topic as scheduled in the course outline) for the group discussion that they will lead. Students will perform their assignments individually or in groups depending on class size, and dates/topics will be assigned at random if the number of dates/topics chosen voluntarily do not cover the class' topics.

A. Leading a Group Discussion (25% of final grade). Leading a group discussion consists of preparing a single-spaced one-page summary of the selected article, and posting it in the dedicated D2L online discussion forum to be discussed with the rest of the class. In the summary, students will be asked to examine, in detail, a peer-reviewed journal article, which other students in the class will have read as well. The summary will be posted in the discussion forum by 5pm on the Wednesday preceding the scheduled time of the class. Students missing this deadline without instructor approval will receive a 0% grade for this assignment. During the class, students leading the discussion will be required to present their summary of the article and lead the group discussion. Evaluation is based on creativity and success in engaging student participation in the online class discussion; and clarity, accuracy and completeness of the summary. As a guideline, each leading discussion summary assignment should include: (1) a brief overview of the subject of the article, (2) the main question that the article aims to address, the relevance of it in the context of the topic of the week, and the authors' hypothesis, (3) a detailed description of the methods and procedures used, (4) the results of the study, (5) the authors' interpretation of the results, (6) the authors' general conclusion, (7) the student's observations about the study (including merits and/or limits of the experimental approach used), and (8) the student's suggestions for future studies given the findings provided in the article. Students are encouraged to read additional research as needed and/or to prepare material (such as handouts or prepared questions) in order to engage the class and stimulate relevant discussion. In order to actively participate in the discussion, students attending are required to read the article presented as well as additional material related to that topic in advance of the class.

B. Prepared Questions (10% of final grade). Students who are NOT leading a discussion are required to read one of the articles that will be discussed during each class, and post a related discussion question on the D2L forum. This question should be posted at least 24 hours before the class begins. Evaluation is based on the quality of the questions submitted throughout the course. Students not posting on the D2L online discussion forum without instructor approval will receive a 0% grade for that specific week. C. Term paper (40% of final grade). Each student will write a term paper consisting of a research proposal. The proposal must focus on a topic covered during the course. The topic chosen for the proposal could be the same as that chosen (or assigned) for each student's leading discussion assignments. In the proposal, students are required to formulate one or two experiments that would make an original contribution to the literature/topic that the proposal focuses on. Term papers will be submitted by email (protzner@ucalgary.ca) to the instructor in .pdf format. The content of the paper must be organized into the following sub-headings: (1) Title of the proposal and name of the student, (2) Abstract (150 words maximum), (3) Topic/literature overview, (4) Objective of the proposal, (5) Methods, (6) Expected results, (7) Implications and conclusions, (8) References (minimum 10; reference list in any format). Title of the proposal, name of the student, and abstract will form the "Title page" of the proposal. The body of the paper (excluding title page, abstract, and reference list) must not exceed five pages (double spaced, 12 point Times or metrically equivalent font). No figures or tables should be included in the paper. Evaluation is based on clarity, accuracy and completeness, and special consideration will be given to the novelty and originality of the proposal. To assist students in preparing their research proposals, there will be review and discussion of the proposals in class. At any time between Oct. 17 and Oct 31, students will submit a brief statement about the focus of their research proposal. This should include a statement of the topic to be discussed, some key points regarding the research question to be addressed and the methods to be used, and a brief statement regarding why the research question is important. The instructor will provide feedback on these statements to ensure that students are on target for success with the final research proposal. The completed research proposals will be due on Tuesday December 6th, 2022. Without instructor approval, late submissions of the research proposals will not be accepted.

D. Discussion Participation (25% of final grade). The engagement and quality of the interactions and discussion each student provides, outside of the group discussion they lead and the required online questions they pose, will constitute the last 25% of their grade.

University of Calgary Academic Integrity Policy

Academic integrity is the foundation of the development and acquisition of knowledge and is based on values of honesty, trust, responsibility, and respect. We expect members of our community to act with integrity.

Research integrity, ethics, and principles of conduct are key to academic integrity. Members of our campus community are required to abide by our institutional code of conduct and promote academic integrity in upholding the University of Calgary's reputation of excellence. It is your responsibility to ensure that you have read and are familiar with the student academic misconduct policy: https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Student-Academic-Misconduct-Policy.pdf.

Department of Psychology Criteria for Letter Grades

Psychology course instructors use the following criteria when assigning letter grades:

A+ grade: Exceptional Performance. An A+ grade indicates near perfect performance on multiple choice and short answer exams. For research papers/essays/course projects/presentations, an A+ grade is awarded for exceptional work deserving of special recognition and is therefore not a common grade.

A, A- Range: Excellent Performance. Superior understanding of course material. Written work is very strong in terms of critical and original thinking, content, organization, and the expression of ideas, and demonstrates student's thorough knowledge of subject matter.

B Range: *Good Performance*. Above average understanding of course material. Written work shows evidence of critical thinking and attention to organization and editing but could be improved in form and/or content.

C Range: Satisfactory Performance. Adequate understanding of course material. Knowledge of basic concepts and terminology is demonstrated. Written work is satisfactory and meets essential requirements but could be improved significantly in form and content. Note: All prerequisites for courses offered by the Faculty of Arts must be met with a minimum grade of C-.

D range: *Marginally meets standards*. Minimal understanding of subject matter. Written work is marginally acceptable and meets basic requirements but requires substantial improvements in form and content. Student has not mastered course material at a level sufficient for advancement into more senior courses in the same or related subjects.

F grade: Course standards not met. Inadequate understanding of subject matter. Written work does not meet basic requirements. Student has not demonstrated knowledge of course material at a level sufficient for course credit.

Grading Scale

Α+	96-100%	B+	80-84%	C+	67-71%	D+	54-58%
Α	90-95%	В	76-79%	С	63-66%	D	50-53%
Α-	85-89%	B-	72-75%	C-	59-62%	F	0-49%

It is at the instructor's discretion to round off either upward or downward to determine a final grade when the average of term work and final examinations is between two letter grades.

To determine final letter grades, final percentage grades will be rounded up or down to the nearest whole percentage (e.g., 89.5% will be rounded up to 90% = A but 89.4% will be rounded down to 89% = A-).

Tentative Lecture Schedule

Date	Topic/Activity/Readings/Due Date (revise and add columns & rows as necessary)
W Sep 7	University Lectures begin.
F Sep 09	Literature search and article selection
R Sep 15	Last day to drop a class without a penalty
F Sep 16	Research methods for examining higher cognitive function.
	Last day to add or swap a course
F Sep 23	Autobiographical Memory in healthy populations
	Fee payment deadline for Fall Term full and half courses.
F Sept 30	UNIVERSITY CLOSED National Day for Truth and Reconciliation
F Oct 7	Autobiographical Memory in clinical populations
M Oct 10	Thanksgiving Day, University closed (except Taylor Family Digital Library, Law, Medical,
	Gallagher and Business Libraries). No lectures.
F Oct 14	Research Proposal Discussion
	*** Brief statements regarding the focus of research proposals are due any time
	between Oct. 17 and Oct 31
F Oct 21	Attention and Mind Wandering in healthy populations
F Oct 28	Attention and Mind Wandering in clinical populations
F Nov 4	Emotion and Mood Regulation in healthy populations
Nov 6-12	Term Break No Classes
F Nov 11	Remembrance Day (Observed). University Closed (except Taylor Family Digital Library,
	Law, Medical, Gallagher and Business Libraries). No lectures.
F Nov 18	Emotion and Mood regulation in clinical populations
F Nov 25	Sex Differences in Cognition in healthy populations
F Dec 2	Sex Differences in Cognition in clinical populations
T Dec 6	Research Proposals Due
W Dec 7	Fall Term Lectures End.
	Last day to withdraw with permission from Fall Term half courses.
Dec 10-21	Fall Final Exam Period

Course Credits for Research Participation:

Research course credit is not allowed in 400- and 500-level courses, so Extra Research Participation Course Credit is Not Offered for this Course.

Absence From A Test/Exam

Makeup tests/exams are **NOT** an option without the approval of the instructor. Students who miss a test/exam have up to 48 hours to contact the instructor to ask for a makeup test/exam. It's the instructor's discretion if they will allow a make-up exam. Students who do not schedule a makeup test/exam with the instructor within this 48-hour period forfeit the right to a makeup test/exam. At the instructor's discretion, a makeup test/exam may differ significantly (in form and/or content) from a regularly scheduled test/exam. Once approved by the instructor a makeup test/exam must be written within 2 weeks of the missed test/exam on a day/time scheduled by the instructor. If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam https://www.ucalgary.ca/registrar/exams/deferred-exams.

Travel During Exams

Consistent with University regulations, students are expected to be available to write scheduled exams at any time during the official December and April examination periods. Requests to write a make-up exam because of conflicting travel plans (e.g., flight bookings) will NOT be considered by the department. Students are advised to wait until the final examination schedule is posted before making any travel arrangements. If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam https://www.ucalgary.ca/registrar/exams/deferred-exams. Students with an exceptional extenuating circumstance (e.g., a family emergency) should contact the Department of Psychology (psyugrd@ucalgary.ca).

Reappraisal of Graded Term Work http://www.ucalgary.ca/pubs/calendar/current/i-2.html

Reappraisal of Final Grade http://www.ucalgary.ca/pubs/calendar/current/i-3.html

Academic Accommodations

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services; SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit www.ucalgary.ca/access/. Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor. The full policy on Student Accommodations is available at https://www.ucalgary.ca/legal-services/university-policies-procedures/accommodation-students-disabilities-procedure.

Academic Misconduct

For information on academic misconduct and its consequences, please see the University of Calgary Calendar at http://www.ucalgary.ca/pubs/calendar/current/k.html

Instructor Intellectual Property

Course materials created by professor(s) (including course outlines, presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the professor(s). These

materials may NOT be reproduced, redistributed or copied without the explicit consent of the professor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

Copyright Legislation

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (https://www.ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy) and requirements of the copyright act (https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html) to ensure they are aware of the consequences of unauthorized sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

Freedom OF Information and Protection of Privacy

Student information will be collected in accordance with typical (or usual) classroom practice. Students' assignments will be accessible only by the authorized course faculty. Private information related to the individual student is treated with the utmost regard by the faculty at the University of Calgary

Student Support and Resources

https://www.ucalgary.ca/registrar/registration/course-outlines

Important Dates

The last day to drop this course with no "W" notation and still receive a tuition fee refund is Thursday, September 15, 2022. Last day add/swap a course is Friday, September 16, 2022. The last day to withdraw from this course is Wednesday, December 7, 2022

https://www.ucalgary.ca/pubs/calendar/current/academic-schedule.html#fall2017